



Answers to Commonly Asked Questions

THE MARYLAND CLEAN CAR PROGRAM

January 25, 2008

What is the Maryland Clean Car Program?

There are two types of motor vehicle emission programs: the federal program (also called the Tier 2 program) and the California clean car program (also called the CA LEV 2 program) which is usually stricter than the federal program. The California clean car program significantly reduces greenhouse gas emissions and also provides additional reductions in air toxics, and ozone forming emissions. The federal Tier 2 program does not directly address greenhouse gas emissions.

Why is the Clean Car Program important?

The Clean cars program helps Maryland in four important ways. First, it is a key part of the States plan to combat global warming. Second, it helps move the State closer to meeting federal health-based standards for ozone in fine particles. Third, it reduces emissions of air toxics like benzene. Finally, it helps reduce air pollution that damages the Chesapeake Bay.

What are the environmental benefits of this program?

This program will provide significant reductions in greenhouse gases and toxics (Benzene, 1,3, Butadiene and Acetaldehyde) from on-road vehicles. It is estimated that when fully implemented, the Maryland Clean Car Program will reduce emissions of CO₂ by 7.8 million tons per year and air toxics by 80.2 tons/year. The CO₂ reductions provided by this program are the equivalent to removing one 1,200 megawatt coal burning power plant from the state. In addition, by 2025 the Maryland Clean Car Program will reduce the emissions of NO_x and VOCs by 5.18 tons/day and 3.55 tons/day respectively from on-road vehicles.

Do we really need to regulate greenhouse gases from automobiles?

Yes, based on current greenhouse gas emission reporting guidelines, the transportation sector accounts for approximately 33 percent of the total U.S. greenhouse gas emissions in 2005¹. Transportation is the fastest-growing source of CO₂ in the U.S. and CO₂ is the most prevalent greenhouse gas.

¹ EPA 2005 Inventory, <http://www.epa.gov/climatechange/emissions/downloads06/07CR.pdf>, pp44



Have other states adopted the clean car program?

Yes, fourteen states, including Maryland, have adopted the clean car program, including California, Oregon, Washington, New York, Vermont, Maine, Massachusetts, New Mexico, Rhode Island, Connecticut, New Jersey, Pennsylvania, and Arizona. Canada has also adopted a set of clean car standards similar to California. Once these states fully implement the clean car standards, well-over one third of all new vehicles sold in North America will have to meet these new standards. A number of additional states are planning to or are considering adoption of the Clean Cars Program.

When will the Maryland Clean Program be implemented?

The Maryland Clean Car Program will begin with model year 2011 vehicles.

What vehicles are affected by the Clean Car Program?

The Maryland Clean Car Program will cover all gasoline and diesel vehicles up to 8,500 lbs.

Will Maryland have to use California fuel to receive the emission benefits of this program?

No, all emission reductions for this program were calculated using the federal gasoline that is currently used in Maryland. In addition, beginning in 2004 the federal gasoline standards were changed to be almost identical to that of California.

Will the Maryland Clean Car Program increase the price of automobiles?

Currently there is no price difference for the consumer. For the ozone-reducing standards, the difference between cost estimates for the federal Tier 2 program by EPA and the CA LEV 2 program is \$100 per vehicle, and that minimal cost is not being passed on to the consumer. For the greenhouse gas compliant standards, which begin in 2009 and are fully phased in by 2016, it is expected that the incremental cost will be approximately \$1,000 by 2016. It is estimated that the increased vehicle costs will be completely offset by reduced operating costs, resulting in net savings to consumers of \$1,000 for trucks and \$2,000 for cars by 150,000 miles. Also, it is estimated that the incremental cost of the vehicle will be paid back to the consumer within the first two to three years.

Will the Maryland Clean Car Program restrict vehicle choice?

Not at all, the selection of overall vehicles is not affected. The California LEV 2 program is not new and several states such as New York and Massachusetts have had it in place for years. Currently, even vehicles such as Ferraris, Lamborghinis, and Hummers are all certified under the California program. In fact because the Maryland Clean Car Program includes advanced, super-low-emission vehicles that are only available in states with these programs, Maryland buyers will have more choices.

Will the Maryland Clean Car Program restrict the sale of diesel vehicles?

No, currently most new diesel vehicles are not available for sale in the entire country because they can't meet the current federal Tier 2 emission standards for the 2007 model year. The automobile manufacturers are working on incorporating new technologies and plan to have new diesels that meet both federal Tier 2 and California LEV 2 standards in the marketplace by model year 2009. Maryland should not be affected since its program will not be implemented until model year 2011. Other large diesels, such as those used by farmers, are not regulated by the Maryland Clean Car Program because of their size--the program applies only to vehicles 8,500 lbs. or less.

Will this program restrict the use of ethanol and biodiesel?

No, Maryland is required to use federally mandated fuel. Fuels that contain ethanol and biodiesel will still have to meet these federal fuel requirements in order to be used in Maryland. In addition, since 2004, California has mandated the use of ethanol in all its gasoline.

Will this program hurt cross-border sales?

No, Maryland dealers will still be able to sell federal Tier 2 vehicles to residents in other states as long as the vehicle is not titled and registered in Maryland. Also, out-of-state dealers will also be allowed to sell CALEV 2 vehicles to Maryland residents.

Is the Maryland Clean Car Program necessary because the air is cleaner now, and new cars are getting cleaner?

Yes, we have made significant strides in improving ozone air quality, but we need to achieve even lower levels to protect human health and meet new standards. The auto industry has done a great job meeting the challenge posed by more stringent new vehicle standards. But, because the miles being driven in Maryland increase by about 1.5 to 2 percent per year, technology must continue to improve to ensure decreasing emissions from the light-duty vehicle sector.

In addition, motor vehicles produce a significant percent of the greenhouse gas emissions in our state. Greenhouse gases cause global warming. Effects of global warming in Maryland include reduced snow pack, increased coastal erosion, and reduced water supplies for people and agriculture. The Maryland Clean Cars Program is the only program to reduce greenhouse gas emissions from the mobile sector.

By increasing the cost of new vehicles, the proposed rules will decrease the sale and use of new vehicles and increase the average age of Maryland's fleet. Because vehicles emit higher levels of pollution as they age, emission reductions will be less than is projected.

California estimated that the increased cost imposed by the greenhouse gas program, taken together with the anticipated fuel savings to the consumer, would have a minor effect on vehicle sales and vehicle turnover. MDE expects to see negligible impact on the average age of the Maryland fleet due to this program.

The proposed rules should not be adopted until the legal issues raised against them are settled.

MDE disagrees. It will likely take many years for the legal challenges in California's greenhouse gas regulations (and subsequent appeals) to be fully resolved in state and federal courts. MDE believes that Maryland would lose an important opportunity for emission reductions and public health protection if we waited until legal issues are resolved. If California's greenhouse gas standards are ultimately overturned, states would be required to align fully with California rules or return to federal standards. Even without the greenhouse gas reductions, Maryland will still benefit from reduced emissions of CO, VOCs, NOx, and air toxics provided by the CA LEV standards.

The greenhouse gas standards are a de facto fuel economy standard which states are prevented from establishing by the federal Energy Policy Conservation Act (EPCA).

New California vehicle standards were developed specifically to regulate greenhouse gas emissions, not increase fuel economy. The rules were specifically designed to offer flexibility in the way those reductions are achieved. Manufacturers can use a wide array of existing and emerging technologies to reduce emissions. It is true that many of those technologies may have the secondary benefit of increasing fuel economy. However, the sole purpose of California's standards, is to regulate and reduce greenhouse gas emissions.

Compliance with the greenhouse gas requirements will reduce vehicle weight and size, which will reduce vehicle utility and also compromise vehicle safety.

As indicated by the California Air resources Board (CARB) in its Final Statement of Reasons, California law specifically prohibits CARB from using weight reduction or vehicle class elimination as a mechanism to achieve compliance with the greenhouse gas provisions of the CARB standard. This report identified thirty-five technologies that are currently available and could be used to meet the GHG requirements. Of these thirty-five only two involved weight reduction measures. The Department believes that CARB's analysis of the available technology options is sound and agrees that many of the proposed technologies are either in current production or are in late stage development by automakers. In addition, the greenhouse gas provisions provide sufficient lead-time for automakers to cost-effectively integrate these existing technologies into production. The Department agrees with CARB's analysis of the greenhouse gas provisions that weight reduction strategies are not necessary. Weight reduction strategies that may be employed by automakers are business decisions by individual automakers and not the result of requirements of either the

CA LEV II standards or the Program. In addition, any manufacturer that chooses to reduce vehicle weight will still be required to comply with all federal vehicle safety standards.

Adopting the Clean Car Program will allow California regulators to control the kind of vehicles sold and used in Maryland.

Not true, under the Clean Air Act, Maryland will always have the option of choosing federal vehicle emissions standards or those established by California. If the Clean Car Program is adopted, Maryland will retain the ability to “opt out” of the California emissions standards at any time in the future. If California makes any significant changes to the Clean Car Program they are required to give the auto manufacturers at least two years lead-time. If Maryland did not want to follow California’s actions it would have at least two years to opt out.

The Clean Car Program has unrealistic technology aspects such as fuel cell vehicles. When this technology fails to be introduced Maryland will not have any vehicle options?

This will not happen because under the California program, California is required to conduct periodic technology reviews to determine if the technologies required under the program will be feasible. If not, California will adjust its program to incorporate the appropriate technology. An example of this was in the 1990s the California program required electric vehicles. After conducting a technology review and determining that these vehicles would not be available California made the appropriate adjustments in its program. But, because of the electric vehicle requirement, the manufacturers were able to make the appropriate battery advances that lead to the introduction of hybrid vehicles in the late 1990s.